## ABSTRACT

A method for classifying a type of bottom on a bottom under a liquid includes the steps of performing an acoustic reflection measurement, in which a first attribute is determined which represents a strength with which acoustic waves are reflected from a location on the bottom through the liquid in a reflection direction. Further, the method includes the steps of performing an acoustic scattering measurement, in which a second attribute is determined of acoustic waves that are scattered form the location on the bottom; providing a search unit, which contains information with regard to different combinations of the values of the first and second attributes, combinations respective associates the with and bottom classifications; and identifying a bottom classification of the location on the basis of the bottom classification which the search unit associates with a combination of the first and second attributes.